CONTENTS

Volume 39 Number 1 1977

W. Admiraal Influence of Light and Temperature on the Growth Rate of Estuarine Benthic Diatoms in Culture 1 W. Admiraal	M. Yamaguchi Estimating the Length of the Exponential Growth Phase: Growth Increment Observations on the Coral-Reef Asteroid Culcita novaeguineae 57
Salinity Tolerance of Benthic Estuarine Diatoms as Tested with a Rapid Polarographic Measurement of Photosynthesis	S. Behrens Yamada Geographic Range Limitation of the Intertidal Gastropods Littorina sitkana and L. planaxis 61
J. J. Childress Effects of Pressure, Temperature and Oxygen on the Oxygen-Consumption Rate of the Midwater Copepod Gaussia princeps 19	D. F. Dunn Locomotion by <i>Epiactis prolifera</i> (Coelenterata: Actiniaria) 67
J. E. Mattison, J. D. Trent, A. L. Shanks, T. B. Akin, J. S. Pearse	C. Valentin, K. Anger In-situ Studies on the Life Cycle of Diastylis rathkei (Cumacea: Crustacea) 71
Movement and Feeding Activity of Red Sea Urchins (Strongylocentrotus franciscanus) Adjacent to a Kelp Forest 25	J. Aiken, R. H. Bruce, J. A. Lindley Ecological Investigations with the Undulating
B. F. Phillips, N. A. Campbell, W. A. Rea Laboratory Growth of Early Juveniles of the Western Rock Lobster <i>Panulirus longipes cygnus</i> 31	Oceanographic Recorder: The Hydrography and Plankton of the Waters Adjacent to the Orkney and Shetland Islands 77
D. F. Dunn Dynamics of External Brooding in the Sea Anemone	S. I. Ahmed, R. A. Kenner, T. T. Packard A Comparative Study of the Glutamate Dehydro- genase Activity in Several Species of Marine
Epiactis prolifera 41 S. S. Rossi, J. W. Anderson Accumulation and Release of Fuel-Oil-Derived Diaromatic Hydrocarbons by the Polychaete Neanthes arenaceodentata 51	Phytoplankton 93 S. Kjelleberg, N. Håkansson Distribution of Lipolytic, Proteolytic, and Amylolytic Marine Bacteria between the Lipid Film and the Subsurface Water 103
Volume 39 N	umber 2 1977
R. W. Eppley, J. H. Sharp, E. H. Renger, M. J. Perry, W. G. Harrison Nitrogen Assimilation by Phytoplankton and Other Microorganisms in the Surface Waters of the	R. Kenny Growth Studies of the Tropical Intertidal Limpet Acmaea antillarum 161
R. W. Eppley, J. H. Sharp, E. H. Renger, M. J. Perry, W. G. Harrison Nitrogen Assimilation by Phytoplankton and Other	R. Kenny Growth Studies of the Tropical Intertidal Limpet Acmaea antillarum 161 C. Falconetti, D. Fredj-Reygrobellet, G. Fredj Induction de l'émission des gamètes et premiers stades du développement larvaire chez l'astérie fissipare Sclerasterias richardi. [Induction of Gamete Shedding and the First Stages of Larval Development
R. W. Eppley, J. H. Sharp, E. H. Renger, M. J. Perry, W. G. Harrison Nitrogen Assimilation by Phytoplankton and Other Microorganisms in the Surface Waters of the Central North Pacific Ocean 111 M. J. Moran, P. F. Sale Seasonal Variation in Territorial Response, and Other Aspects of the Ecology of the Australian Temperate	R. Kenny Growth Studies of the Tropical Intertidal Limpet Acmaea antillarum 161 C. Falconetti, D. Fredj-Reygrobellet, G. Fredj Induction de l'émission des gamètes et premiers stades du développement larvaire chez l'astèrie fissipare Sclerasterias richardi. [Induction of Gamete Shedding and the First Stages of Larval Development in the Fissiparous Asteroid Sclerasterias richardi] 171 R. Gaudy Etude des modifications du métabolisme respira-
R. W. Eppley, J. H. Sharp, E. H. Renger, M. J. Perry, W. G. Harrison Nitrogen Assimilation by Phytoplankton and Other Microorganisms in the Surface Waters of the Central North Pacific Ocean 111 M. J. Moran, P. F. Sale Seasonal Variation in Territorial Response, and Other Aspects of the Ecology of the Australian Temperate Pomacentrid Fish Parma microlepis 121 S. Teshima, A. Kanazawa, H. Okamoto Variation in Lipid Classes during the Molting Cycle	R. Kenny Growth Studies of the Tropical Intertidal Limpet Acmaea antillarum 161 C. Falconetti, D. Fredj-Reygrobellet, G. Fredj Induction de l'émission des gamètes et premiers stades du développement larvaire chez l'astérie fissipare Sclerasterias richardi. [Induction of Gamete Shedding and the First Stages of Larval Development in the Fissiparous Asteroid Sclerasterias richardi] 171 R. Gaudy Etude des modifications du métabolisme respira- toire de populations d'Acartia clausi (Crustacea: Copepoda) après passage dans le circuit de refroidissement d'une centrale thermo-électrique. [Study on Respiratory Metabolism Modifications in Acartia clausi (Crustacea: Copepoda) Populations after Passage through the Cooling Circuit
R. W. Eppley, J. H. Sharp, E. H. Renger, M. J. Perry, W. G. Harrison Nitrogen Assimilation by Phytoplankton and Other Microorganisms in the Surface Waters of the Central North Pacific Ocean M. J. Moran, P. F. Sale Seasonal Variation in Territorial Response, and Other Aspects of the Ecology of the Australian Temperate Pomacentrid Fish Parma microlepis S. Teshima, A. Kanazawa, H. Okamoto Variation in Lipid Classes during the Molting Cycle of the Prawn Penaeus japonicus R. Gaudy, J. P. Guérin Dynamique des populations de Tisbe holothuriae (Crustacea: Copepoda) en élevage sur trois régimes artificiels différents. [Population Dynamics of Tisbe holothuriae (Crustacea: Copepoda) Reared	R. Kenny Growth Studies of the Tropical Intertidal Limpet Acmaea antillarum 161 C. Falconetti, D. Fredj-Reygrobellet, G. Fredj Induction de l'émission des gamètes et premiers stades du développement larvaire chez l'astérie fissipare Sclerasterias richardi. [Induction of Gamete Shedding and the First Stages of Larval Development in the Fissiparous Asteroid Sclerasterias richardi] 171 R. Gaudy Etude des modifications du métabolisme respira- toire de populations d'Acartia clausi (Crustacea: Copepoda) après passage dans le circuit de refroidissement d'une centrale thermo-électrique. [Study on Respiratory Metabolism Modifications in Acartia clausi (Crustacea: Copepoda) Populations after Passage through the Cooling Circuit

Volume 39 Number 3 1977

Heterotrophic Bacterial Dynamics in the Lower Fraser River, Its Estuary and Georgia Strait, British Columbia, Canada 203	R. D. Hammond, E. Naylor Effects of Dusk and Dawn on Locomotor Activity Rhythms in the Norway Lobster Nephrops norvegicus 253
M. Brylinsky Release of Dissolved Organic Matter by Some Marine	S. G. George, T. L. Coombs The Effects of Chelating Agents on the Uptake and Accumulation of Cadmium by Mytilus edulis 261
H. L. Conway Interactions of Inorganic Nitrogen in the Uptake and Assimilation by Marine Phytoplankton 221	M. E. Christiansen, J. D. Costlow, Jr., R. J. Monroe Effects of the Juvenile Hormone Mimic ZR-515 (Altosid®) on Larval Development of the Mud-Crab Rhithropanopeus harrisii in Various Salinities and Cyclic Temperatures
B. C. Coull, R. L. Ellison, J. W. Fleeger, R. P. Higgins, W. D. Hope, W. D. Hummon, R. M. Rieger, W. E. Sterrer, H. Thiel, J. H. Tietjen Quantitative Estimates of the Meiofauna from the Deep Sea off North Carolina, USA 233	M. E. Christiansen, J. D. Costlow, Jr., R. J. Monroe Effects of the Juvenile Hormone Mimic ZR-512 (Altozar®) on Larval Development of the Mud-Crab Rhithropanopeus harrisii at Various Cyclic Temperatures
C. S. Gallardo Two Modes of Development in the Morphospecies Crepidula dilatata (Gastropoda: Calyptraeidae) from Southern Chile 241	C. Patterson, D. Settle Comparative Distributions of Alkalies, Alkaline Earths and Lead among Major Tissues of the Tuna <i>Thunnus</i> alalunga 289
Volume 39 Nur	mber 4 1977
Volume 39 Nur A. N. Sastry, L. Zeitlin-Hale Survival of Communally Reared Larval and Juvenile Lobsters, Homarus americanus 297	mber 4 1977 G. Walker "Copper" Granules in the Barnacle Balanus balanoides 343
A. N. Sastry, L. Zeitlin-Hale Survival of Communally Reared Larval and Juvenile Lobsters, Homarus americanus 297 R. R. Strathmann, K. Vedder Size and Organic Content of Eggs of Echinoderms and Other Invertebrates as Related to Develop-	G. Walker "Copper" Granules in the Barnacle <i>Balanus</i>
A. N. Sastry, L. Zeitlin-Hale Survival of Communally Reared Larval and Juvenile Lobsters, Homarus americanus 297 R. R. Strathmann, K. Vedder Size and Organic Content of Eggs of Echinoderms and Other Invertebrates as Related to Developmental Strategies and Egg Eating 305 H. Mukai, H. Watanabe Shedding of Gametes in the Compound Ascidian	G. Walker "Copper" Granules in the Barnacle Balanus balanoides R. K. Peddicord Salinity and Substratum Effects on Condition Index of the Bivalve Rangia cuneata P. K. Dayton, R. J. Rosenthal, L. C. Mahen, T. Antezana
A. N. Sastry, L. Zeitlin-Hale Survival of Communally Reared Larval and Juvenile Lobsters, Homarus americanus 297 R. R. Strathmann, K. Vedder Size and Organic Content of Eggs of Echinoderms and Other Invertebrates as Related to Develop- mental Strategies and Egg Eating 305 H. Mukai, H. Watanabe	G. Walker "Copper" Granules in the Barnacle Balanus balanoides R. K. Peddicord Salinity and Substratum Effects on Condition Index of the Bivalve Rangia cuneata 9. K. Dayton, R. J. Rosenthal, L. C. Mahen,
A. N. Sastry, L. Zeitlin-Hale Survival of Communally Reared Larval and Juvenile Lobsters, Homarus americanus 297 R. R. Strathmann, K. Vedder Size and Organic Content of Eggs of Echinoderms and Other Invertebrates as Related to Develop- mental Strategies and Egg Eating 305 H. Mukai, H. Watanabe Shedding of Gametes in the Compound Ascidian Botryllus primigenus 311 HD. Pfannenstiel	G. Walker "Copper" Granules in the Barnacle Balanus balanoides 343 R. K. Peddicord Salinity and Substratum Effects on Condition Index of the Bivalve Rangia cuneata 351 P. K. Dayton, R. J. Rosenthal, L. C. Mahen, T. Antezana Population Structure and Foraging Biology of the Predaceous Chilean Asteroid Meyenaster
A. N. Sastry, L. Zeitlin-Hale Survival of Communally Reared Larval and Juvenile Lobsters, Homarus americanus 297 R. R. Strathmann, K. Vedder Size and Organic Content of Eggs of Echinoderms and Other Invertebrates as Related to Developmental Strategies and Egg Eating 305 H. Mukai, H. Watanabe Shedding of Gametes in the Compound Ascidian Botryllus primigenus 311 HD. Pfannenstiel Endokrinologische und genetische Untersuchungen an einer proterandrischen Population des Polychaeten Ophryotrocha labronica. [Endocrinological and Genetical Studies on a Protandric	G. Walker "Copper" Granules in the Barnacle Balanus balanoides R. K. Peddicord Salinity and Substratum Effects on Condition Index of the Bivalve Rangia cuneata P. K. Dayton, R. J. Rosenthal, L. C. Mahen, T. Antezana Population Structure and Foraging Biology of the Predaceous Chilean Asteroid Meyenaster gelatinosus and the Escape Biology of Its Prey J. E. Burris Photosynthesis, Photorespiration, and Dark

